

WHAT IS CLAIMED IS:

5 1. A method for networking a central controller with a first group of one or more remote devices operating in accordance with a first protocol and a second group of one or more remote devices operating in accordance with a second protocol, comprising:

10 identifying transmissions from said first group and said second group of remote devices;

routing transmissions from said first group of remote devices to a first processor operating in accordance with said first protocol within said central controller; and

15 routing transmissions from said second group of remote devices to a second processor operating in accordance with said second protocol within said central controller.

20 2. The method of claim 1 further comprising embedding a first identifier in transmissions from said first group of remote devices and embedding a second identifier in transmissions from said second group of remote devices, wherein transmission from said first and second groups of remote devices are identified in accordance with said first and second identifiers.

25 3. The method of claim 2 wherein said transmissions from said first and second group of remote devices comprise bandwidth requests transmitted in a request contention area.

30 4. The method of claim 3 further comprising transmitting bandwidth grants to said first and second group of remote devices in response to requests for bandwidth.

35 5. The method of claim 1 further comprising assigning one or more time slots during which said first group and second group of remote devices may transmit information to said central

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controller and wherein said central controller identifies
transmission from said first group and second group of remote
5 devices in accordance with said assigned time slots.

6. The method of claim 1 further comprising creating a
first multicast group comprising said first group of remote
devices, creating a second multicast group comprising said second
10 group of remote devices and transmitting group messages from said
central controller to said first group and second group of remote
devices in accordance with said first and second multicast
groups.

7. The method of claim 1 further comprising receiving
15 communications for said first group and second group of remote
devices in accordance with addresses of said first and second
remote devices, routing communications for said first group of
remote devices to said first processor within said central
20 controller, routing communications for said second group of
remote devices to said second processor within said central
controller and transmitting processed communications to addressed
remote devices.

8. A method for networking a cable modem termination
25 system with a first group of one or more cable modems operating
in accordance with a proprietary protocol and a second group of
one or more cable modems operating in accordance with DOCSIS
protocol, comprising:

30 identifying transmissions from said first group and second
group of cable modems;

routing transmissions from said first group of cable modems
to a first processor that operates in accordance with said
proprietary protocol within said cable modem termination system;

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routing transmissions from said second group of cable modems
to a second processor that operates in accordance with the DOCSIS
5 protocol within said cable modem termination system.

9. The method of claim 8 further comprising embedding a
first identifier in transmissions from said first group of cable
modems and embedding a second identifier in transmissions from
10 said second group of cable modems, wherein transmission from said
first group and second group of cable modems are identified in
accordance with said first and second identifiers.

10. The method of claim 9 wherein said transmissions from
15 said first and second group of cable modems comprise bandwidth
requests transmitted in a request contention area.

11. The method of claim 10 further comprising transmitting
bandwidth grants to said first and second group of cable modems
20 in response to said requests for bandwidth.

12. The method of claim 8 further comprising assigning one
or more time slots during which said first group and second group
of cable modems may transmit information to said cable modem
25 termination system and wherein said cable modem termination
system identifies transmission from said first group and second
group of cable modems in accordance with said assigned timeslots.

13. The method of claim 8 further comprising creating a
30 first multicast group comprising said first group of cable
modems, creating a second multicast group comprising said second
group of cable modems and transmitting group messages from said
cable modem termination system to said first group and second
group of cable modems in accordance with said first and second
35 multicast groups.

14. The method of claim 8 further comprising receiving
communications for said first group and second group of cable
5 modems in accordance with addresses of said first group and
second group of cable modems, routing communications for said
first group of cable modems to said first processor within said
cable modem termination system, routing communications for said
second group of cable modems to said second processor within said
10 cable modem termination system and transmitting processed
communications to addressed cable modems.

15. A two way communication system comprising:
a plurality of remote devices wherein a first group of one
15 or more remote devices communicate with a local host in
accordance with a first protocol and a second group of one or
more remote devices communicate with said local host in
accordance with a second protocol,

wherein said local host comprises a protocol processor for
20 identifying transmissions from said first and second groups of
remote devices, and wherein said protocol processor routes
transmissions from said first group of remote device to a first
processor operating in accordance with the first protocol and
wherein said protocol processor routes transmissions from said
25 second group of remote devices to a second processor operating
in accordance with the second protocol.

16. The two way communication system of claim 15 wherein
said local host further comprises a central processor for
30 scheduling transmission from said first and second group of
remote devices.

17. The two way communication system of claim 15 wherein
said local host further comprises an upstream demodulator for
35 receiving transmission from said first and second group of remote

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devices and a downstream modulator for transmitting information to said first and second group of remote devices.

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18. The two way communication system of claim 17 wherein each of said remote devices comprise a downstream demodulator for receiving transmission from said local host and an upstream modulator for transmitting information to said local host.

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19. The two way communication system of claim 18 wherein each of said remote devices further comprise a media access controller for embedding service identifiers in each upstream bandwidth request, wherein said media access controller embeds a first service identifier for remote devices that operate in accordance with said first protocol and a second service identifier for remote devices that operate in accordance with said second protocol.

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20. A cable television system, comprising:

a plurality of cable modems wherein a first group of one or more cable modems communicate with a cable modem termination system in accordance with a proprietary protocol and a second group of one or more cable modems communicate with said cable modem termination system in accordance with DOCSIS protocol,

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wherein said cable modem termination system comprises a protocol processor for identifying transmissions from said first and second groups of cable modems, and wherein said protocol processor routes transmissions from said first group of cable modems to a first processor operating in accordance with the proprietary protocol and wherein said protocol processor routes transmissions from said second group of cable modems to a second processor operating in accordance with the DOCSIS protocol.

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21. The cable television system of claim 20 wherein said transmissions from said first and second groups of cable modems
5 comprise bandwidth requests transmitted in a request contention area.

22. The cable television system of claim 21 wherein said cable modem termination system further comprises a central
10 processor for scheduling transmission from said first and second group of cable modems in response to said bandwidth requests.

23. The cable television system of claim 20 wherein said cable modem termination system further comprises an upstream
15 demodulator for receiving transmission from said first and second group of cable modems and a downstream modulator for transmitting information to said first and second group of cable modems.

24. The cable television system of claim 23 wherein each
20 of said cable modems comprise a downstream demodulator for receiving transmission from said cable modem termination system and an upstream modulator for transmitting information to said cable modem termination system.

25. The cable television system of claim 24 wherein each
25 of said cable modems further comprise a media access controller for embedding service identifiers in each upstream bandwidth request, wherein said media access controller embeds a first service identifier for cable modems that operate in accordance
30 with said proprietary protocol and a second service identifier for cable modems that operate in accordance with said DOCSIS protocol.